

**ABSTRACT**

1. Device, process and headphones for registering and reproducing sounds, in particular for acoustic component analysis in motor vehicles.
- 2.1 The invention concerns a device for registering and reproducing sounds, in particular for acoustic component analysis in motor vehicles.
- 2.2 According to the invention at least two microphones are provided in the vicinity of the two ears of the user for the binaural collection of sounds and for the translation into electrical signals, to sound shielding devices for providing in the vicinity of the two ears for the shielding of the two ears from the detected sounds, signal processing means for real time processing or real time relaying of the produced electrical signals and to sound transducers for providing in the vicinity of the two ears for the binaural real time production of sound signals corresponding to the relayed or processed signals.
- 2.3 Use for example for acoustic development in motor vehicles.